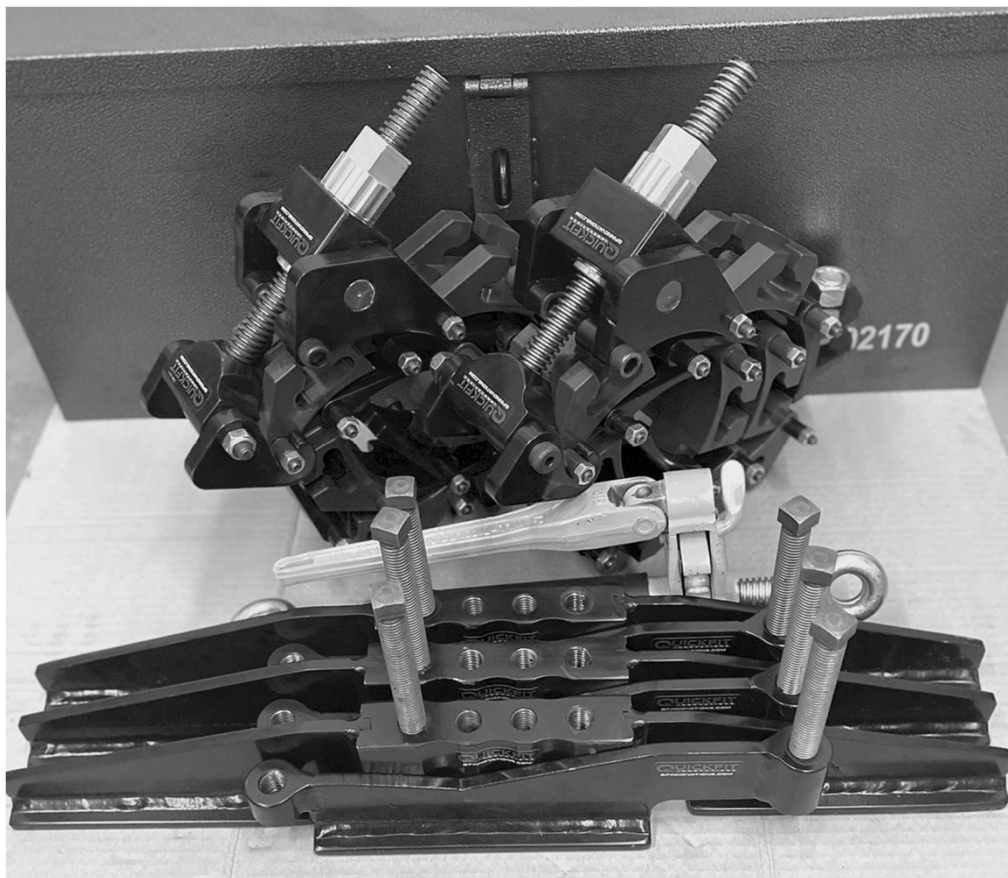






QFII Hybrid-120 User Manual



**CAUTION**

QF Innovations Inc. offers an easy-to-use hybrid pipe fitting clamp, for the purpose of aligning and positioning simultaneously. Please ensure to read the manual and all safety warnings prior to use.

Always use extreme caution and follow all company and jurisdictional safety guidelines when using the product.

QF values your business and we are committed to customer satisfaction and loyalty. We strive to provide innovative pipe fitting solutions and technology and look forward to providing our customers with innovative tool solutions for years to come. The QFII Hybrid is backed by our extensive warranty.

The QFII Hybrid User Guide has been designed to provide you with the best use and practices and information for safe and efficient use of the unit. We are committed to customer service and we invite you to contact us or our distributors directly with any additional questions or technical needs.

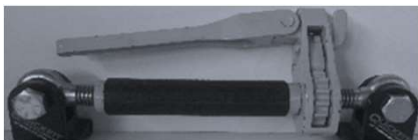
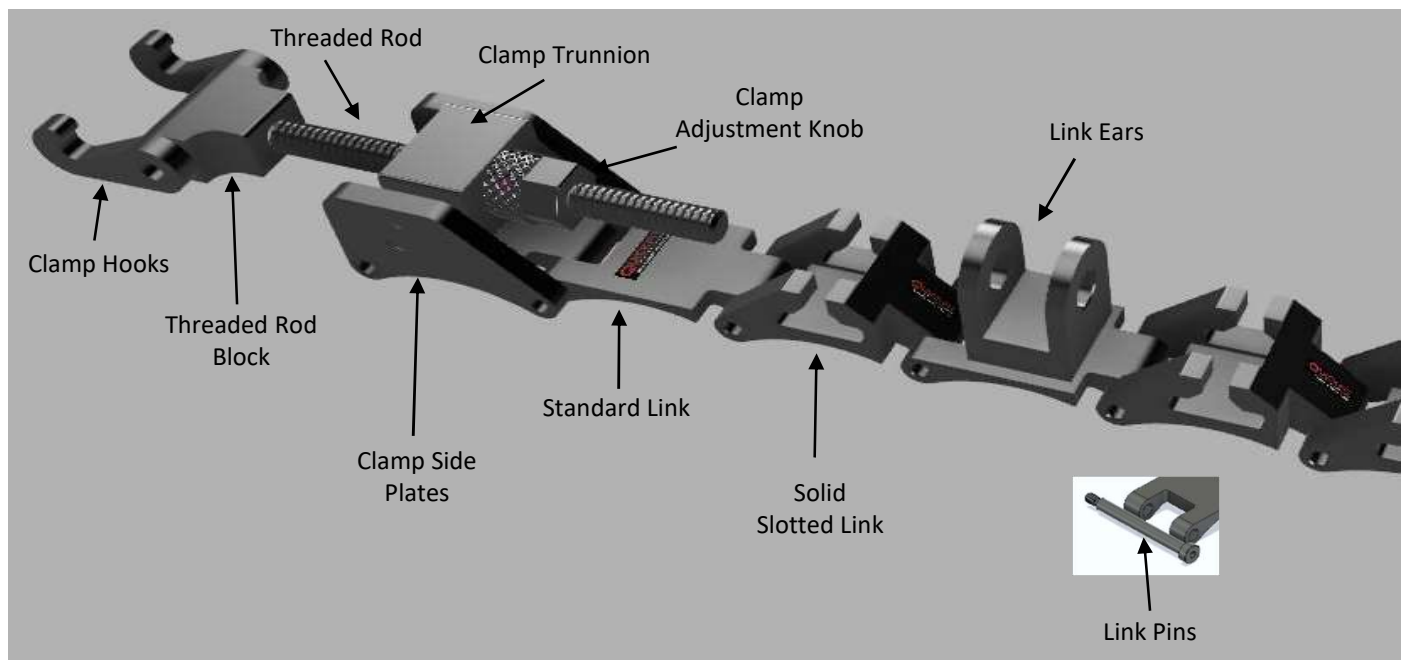


Model

QFII Hybrid-120

Pipe Clamp & Positioner User Guide

Parts & Components Diagram



Positioning Jacks



Single Alignment Bar



Double Alignment Bar

Warranty

All Products manufactured by or for QF Innovations Inc. are guaranteed against defects, faulty workmanship and or materials, for a period of twelve months from the date of purchase.

This warranty is limited to the repair or replacement of any parts found to be defective and no other liability will be assumed.

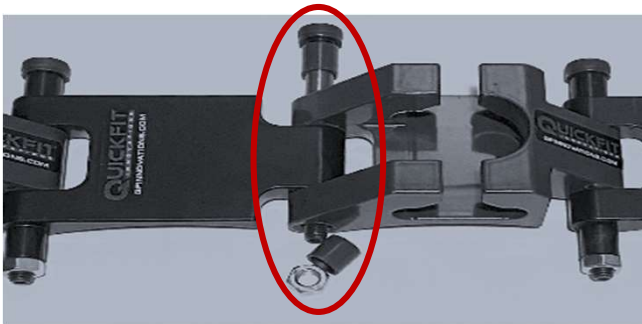
QFII Hybrid Size & Length

The QFII Hybrid unit (QFII-120) comes with 120 inches (304.8cm) of total strap length. 2 x 60 inch straps and 2 Clamp Assemblies

The QFII strap/chain has been designed to be a completely size adjustable and modular unit. Size is determined by pipe circumference and the QFII strap is easily adjusted as needed. Required strap lengths/size are determined by pipe diameter x 3.14 (π) for approximate lengths to fit the desired pipe size. Ex. 14" OD pipe diameter x 3.14 = approx 44" length strap/chain.

Base Unit Size Range

- Pipe Sizes From 6in -18in (2 strap configurations)
- Pipe Sizes From 6in - 34in (single strap configuration)



Link Pins & Spacers

The spacers provided on the QFII link pins are installed to maintain equal pin stick out.

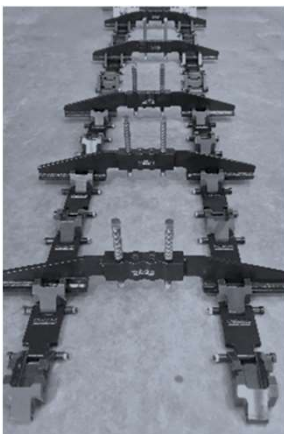
Size & Adjustment

Adding, subtracting or reconfiguring the QFII strap is done by simply removing and reinstalling the link pins. Longer lengths can be achieved by adding 1ft strap extensions, or by simply combining QFII Hybrid unit straps.

Larger size tools are simply a matter of longer chains / straps.

Important

It is important that when pairing straps for cages and double chain clamps that the straps are mirror images of each other and slotted links and link ears are in line with each other on paired straps.



Paired QFII Straps / Chains

Matched and paired QFII Straps allow for component installation when 2 straps are used for double chain and cage clamp applications.



Strap / Chain Installation

The QFII has been designed as a wrench chain with extended link pins. Installation and hook up is as easy as placing the clamp and strap assembly on the required pipe, wrapping the strap around the pipe, while pulling out excess slack and dropping the extended link pins into the clamp hooks and snugging up the clamp adjustment knob.

Note

Backing off the clamp adjustment knob prior to install provides far more clamp adjustability for strap hook up. When pairing straps, always place straps on the pipe in the same direction to ensure paired components for each strap.



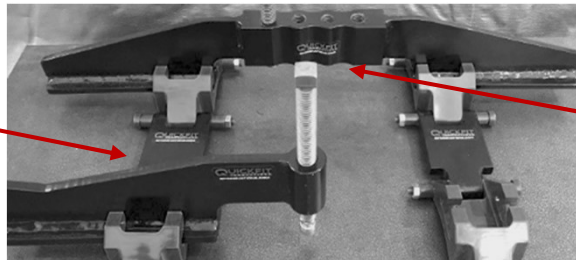
Clamp Styles & Component Installation

The QFII Hybrid was developed as a size adjustable alignment and positioning unit. Additionally, it is capable of forming all the traditional style cages and alignment clamps simply by using some or all of a single unit, (1 or 2 straps and the coinciding alignment bars).

Alignment Bars

Single Alignment Bar

Used to form single and double chain clamps



Double Alignment Bar

Used to form cages and positioning cages, allowing lateral pipe movement for positioning.

Sleeve Clamp



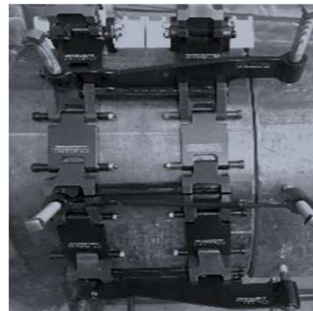
A single strap, with no alignment bars is used to form basic sleeve clamps

Single Chain Clamp



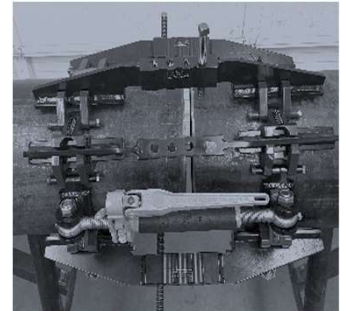
A single strap & alignment bars are used to form single chain clamps

Double Chain Clamp



Paired straps & single alignment bars, are used to form double chain clamps.

Cages & Positioning Cages



Paired straps, on opposing pipe ends, with the double alignment bars are used to form cages.

Note

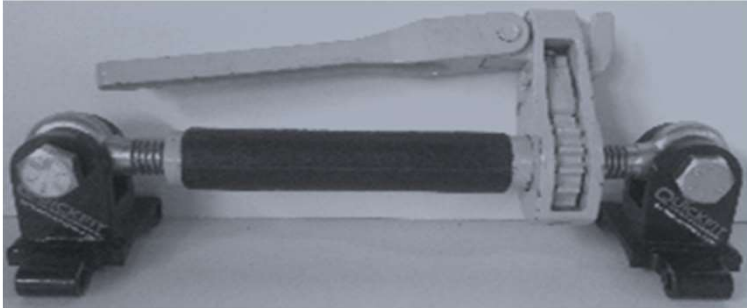
The modular slotted link design for alignment bar and component installation allows users to install alignment bars after the strap / chains are installed on the pipe, as well as reposition them while in use.

When forming cages and positioning cages it is recommended to leave the straps loose and start installing the alignment bars, allowing for far more play to deal with pipe misalignment and to ensure the straps are paired and in line with each other.

Positioning Jacks

Weld Gap Adjustment

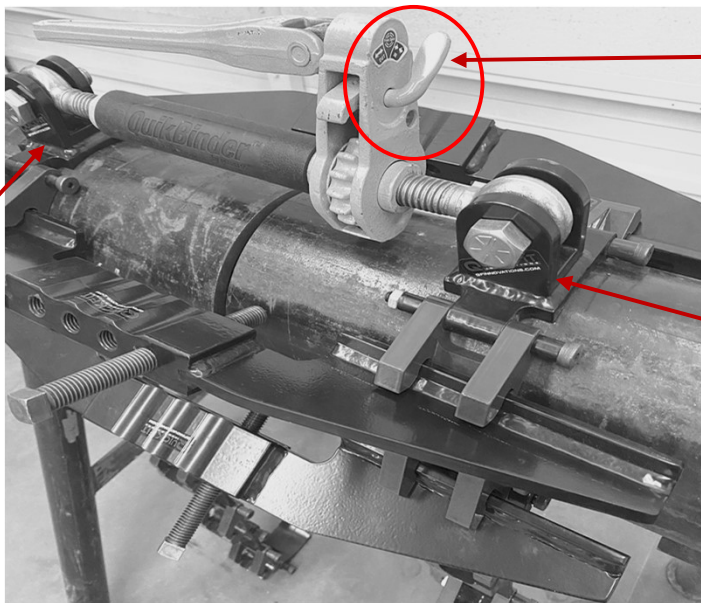
The positioning jacks, or multiple jacks, for larger diameter pipe, can be located anywhere along the strap length. Simply install Link Ears in the same location on opposing straps and insert the jack with the bolts provided. Once installed the jack allows the user to either “pull” pipe together or “push” pipe apart depending on the desired welding gap. The jack is equipped with a toggle switch to change direction and allow for both push and pull applications.



Positioning Jack



Link Ears



Link Ear

Jack Toggle Switch

Dictates whether the pipe will be pulled together or pushed apart. Flip the switch to reverse the direction.

Link Ear

The QF chain / strap link that allows for the separate chains / straps to be connected for positioning and weld gap adjustment.

Important

- It is important for lateral pipe movement that the QFII chain clamps are tightened sufficiently to maintain enough clamping force / grip, to accommodate the required lateral load.
(Tighten Chain Clamp Assembly).
- Prior to completing alignment, it is important to position the pipe joint / adjust gap, as much as possible to minimize the force required for lateral pipe movement while jackbolts are engaged on the pipe surface.



Proper safety precautions should always be taken when using the QFII Hybrid, as with all heavy alignment equipment. A little common sense goes a long way towards preventing accidents involving your QFII Hybrid Pipe Clamp and all other QF Innovations tools.



Warning



- The operator and maintenance personnel shall read and understand the parts and operating manual prior to attempting operation of the equipment.
- Mandatory PPE shall be used at all times.
- The maintenance instructions must be followed in the QFII Hybrid's operating manual.
- Never use the QFII Hybrid (The "Clamp") for other than its intended purpose.
- Clear the general area where the Clamp will be used of all tripping hazards.
- The QFII Hybrid is not intended to support or lift the entire length of the pipe.
- Never use the Clamp as a ground for plasma or welding systems.
- Always check the Clamp for defects such as arc marks, abrasions and nicks prior to operation.
- Make sure that the Clamp will function properly prior to attempting the alignment or positioning of pipes or fittings.
- The Clamp should never be used as the sole support of the pipe or fitting.
- When using the Clamp, basic safety precautions must always be followed to reduce the risk of personal injury.
- Always operate the Clamp in accordance with the operating instructions.
- Reforming and Alignment capacity will vary depending on pipe diameter, wall thickness, and pipe tensile strength. If in doubt, contact QF Innovations Inc.
- The use of snipes and or cheater bars is strictly prohibited.
- Always inspect the Clamp prior to use.

IN ADDITION TO THE ABOVE PROCEDURES, ALL SHOP, NATIONAL AND MANUFACTURER'S SAFETY INSTRUCTIONS CONCERNING THE CLAMPING SYSTEM SHOULD BE FOLLOWED. ALL CLAMPING OPERATIONS SHOULD BE CONDUCTED IN THE BEST OF SAFETY CONDITIONS.



QFII Hybrid Inspection Checklist

The following is a pre-service inspection list to be done prior to daily use.

Warning

Promptly report any malfunction, unusual performance or damage of the QFII unit.

Occasional lubrication of the clamp assembly adjustment knob, both the inside and out, with all weather lithium grease. Keeping all other moving parts, chain links and pins, jack assembly, etc. lubricated is also highly recommended.

Daily Inspection Checklist

ITEM	CHECKED
Jack Inspection, (Thread Wear, Clean & Lubricate) Notes:	
Clamp Assembly Inspection, (Damage, Lubricate, Including Adjustment Knob) Notes:	
Chain Inspection, (Links & Pins) Notes:	
Jackbar / Alignment Bars Inspection, (Damage, Wear, Threads) Notes:	
Complete Assembly Inspection, (Wear / Damage / Lubrication) Notes:	
Inspection Summary:	
Completed by: (Name, Company, Department)	Date (dd/mm/yy)